### Cardolite Printing date 05/23/2014

### Safety Data Sheet acc. to OSHA HCS

Reviewed on 05/23/2014

#### 1 Identification

· Product identifier

· Product Description: Cashew nutshell liquid resin

· Product code: Cardolite NX-5341

· CAS Number: 68390-35-2

- · Application of the substance / the mixture Resin
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: Cardolite Corporation 500 Doremus Avenue

Newark, NJ 07105

USA

Tel: (973) 344-5015 Fax: (973) 344-1197 edelacruz@cardolite.com

- · Information department: Product safety department
- · Emergency telephone number: 24 Hour Emergency: 800-424-9300 CHEMTREC

### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.



May cause sensitisation by skin contact.

- · Information concerning particular hazards for human and environment: Not applicable.
- · Label elements
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard-determining components of labeling:

Cashew nutshell liquid polymer

· Hazard statements

H317 May cause an allergic skin reaction.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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#### **Product Description: Cashew nutshell liquid resin**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P321 Specific treatment (see on this label).

P363 Wash contaminated clothing before reuse. P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Classification system:

NFPA ratings (scale 0 - 4)



Health = 2 Fire = 1 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2 Fire = 1 Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

#### 3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

68390-35-2 Cashew nutshell liquid polymer

· Identification number(s)

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

#### 4 First-aid measures

- Description of first aid measures
- After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eve contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed

No further relevant information available.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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**Product Description: Cashew nutshell liquid resin** 

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#### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters

Promptly isolate the scene by removing all person from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Protective equipment: No special measures required.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities

Keep container tightly closed and in a well ventilated place.

- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

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#### **Product Description: Cashew nutshell liquid resin**

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Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

#### · Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

#### · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties  Information on basic physical and chemical properties General Information		
· pH-value at 25 °C (77 °F):	3	
<ul> <li>Change in condition</li> <li>Melting point/Melting range:</li> <li>Boiling point/Boiling range:</li> </ul>	Undetermined. Undetermined.	
· Flash point:	> 93 ℃ (> 199 ℉)	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:		
Decomposition temperature:	Not determined.	
· Auto igniting:	Not determined.	
· Danger of explosion:	Product does not present an explosion hazard.	
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**Product Description: Cashew nutshell liquid resin** 

		(Contd. of page
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure:	Not determined.	
Density at 25 °C (77 °F):	0.983 g/cm3 (8.203 lbs/gal)	
Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/w	vater): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solids content:	>97.0 %	
· Other information	No further relevant information available.	

### 10 Stability and reactivity

- · Reactivity
- · Chemical stability Product is stable.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

#### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification: Irritating to eyes and skin.
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

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**Product Description: Cashew nutshell liquid resin** 

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#### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

· UN-Number · DOT, ADR, ADN, IMDG · IATA	Not regulated as dangerous go N/A	ods.
· UN proper shipping name · ADR, ADN, IMDG, IATA	N/A	
· Transport hazard class(es)		
· DOT		
N/A		
· Class	N/A	
· Label	N/A	

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Product Description: Cashew nutshell liquid resin

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· ADR, IATA	
· Class	N/A
· Label · ADN/R Class:	N/A N/A
· IMDG	IVA
2 4	
N/A · Class	N/A
· Label	N/A
· Packing group	
· DOT, ADR, IMDG, IATA	N/A
Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
Transport in bulk according to Annex II of	
MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	N/A

### 15 Regulatory information

- $\cdot \ \text{Safety, health and environmental regulations/legislation specific for the substance or mixture} \\$
- · Sara
- · Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

- · Proposition 65
- · Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

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**Product Description: Cashew nutshell liquid resin** 

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· Chemicals known to cause developmental toxicity:

Substance is not listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

· GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard-determining components of labeling:

Cashew nutshell liquid polymer

Hazard statements

H317 May cause an allergic skin reaction.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P321 Specific treatment (see on this label).
P363 Wash contaminated clothing before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing MSDS: Product safety department
- · Contact: Mr Eleazar dela Cruz
- · Date of preparation / last revision 05/23/2014 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

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#### Product Description: Cashew nutshell liquid resin

ACGIH: American Conference of Governmental Industrial Hygienists CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

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USA